

## **What can I do about my Macular Degeneration?**

Patients living with vision loss from age-related macular degeneration (AMD) often ask, “What can I do about my macular degeneration?” Patients may know that, in some ways, they have little control over whether they will develop AMD, since most of the risk for AMD is inherited from our parents. Studies estimate that over 70% of risk for the development of the disease is genetic. The second most significant risk factor is age. The older one gets, the more likely he or she will have macular degeneration. In fact, among Caucasian individuals over 80 years old, the prevalence of the disease is nearly 1 out of 3.

Unfortunately, we cannot pick our parents, and a reasonable alternative to aging has not yet been discovered. Thus, we are left to address habits and lifestyle issues that may not have as much impact as our genes or age, but can be modified. What you can do about macular degeneration involves optimizing your health with lifestyle changes, diet and supplements.

The single most important modifiable risk factor for AMD is smoking. If you smoke, quitting is, by far, the single most important action you can take to preserve your vision. Many newer medicines are designed to help with smoking cessation and are available through your primary care physician. Nicotine substitutes (patch, gum, tablet) may also be purchased without prescription at your local pharmacy. An added benefit of smoking cessation is that you will no longer subject family members and friends to unhealthy second-hand smoke.

If you have attempted to stop smoking previously and were unsuccessful, don’t give up! The average person who has successfully stopped smoking was previously unsuccessful 15 times! The Sonoma County Department of Health Services publishes a brochure with helpful advice about how to stop smoking, as well as information about local smoking cessation classes and other resources. The brochure is online at: [www.sonoma-county.org/health/prev/pdf/tobacco\\_cessation.pdf](http://www.sonoma-county.org/health/prev/pdf/tobacco_cessation.pdf)

After smoking, an individual’s dietary habits are the next most important factor that can be adjusted to control AMD. To affect AMD, it is important not only to “eat right,” but also to eliminate some foods from one’s diet and to avoid obesity. The diet pattern that most completely encompasses what we should do for macular degeneration is the Mediterranean diet. This diet emphasizes consuming fresh fruit and vegetables, fish, olive oil and nuts.

Observational studies suggest that a diet high in omega-3 polyunsaturated fats and low in trans-unsaturated fats – e.g., the Mediterranean diet – may reduce the risk of AMD. Studies also find that the use of olive oil and consumption of nuts may be beneficial. Intake of trans-unsaturated fats (also known as “trans fat”), often found in baked goods and fast food, is associated with a higher prevalence of AMD. A diet with a high glycemic index (high in refined sugar) is associated with a 40% increased risk of progression of AMD.

In addition to selecting the right types of food, it is also important to control quantity. Obesity is a significant risk factor for AMD, as increased abdominal girth (waist size) and body mass have been associated with a greater prevalence of the disease. Individuals who exercise three or more times a week for a half hour or more have been found to have less AMD. Exercising and watching your weight go together and are an important part of reducing risk for AMD, as well as improved overall health.

The third option for controlling AMD is the use of nutritional supplements. The only prospective study (the most scientifically valid type of study) of supplements is the Age-Related Eye Disease Study (AREDS). In this study, some individuals were given a specific combination of antioxidants and zinc and compared to others given a placebo. This large long-term study, sponsored by the National Eye Institute and the National Institute of Health, found that people over 55 years of age with risk factors for advanced AMD reduced the progression of the disease by 25% when taking the vitamin supplements.

AREDS II is underway and is designed to evaluate the effect of the AREDS supplements, combined with lutein/zeaxanthin or omega-3 fatty acids, on the progression to advanced AMD. Until the results of AREDS II are available, the safest recommendation is to use vitamins that strictly adhere to the combination used in AREDS. This vitamin combination is readily available over the counter under several brand names (e.g., Preservision, I-caps). It is safe to use a multi-vitamin, such as Centrum, with AREDS vitamins.

While most of the risk for AMD is not modifiable, you can make important diet and lifestyle changes that can help control the disease to some degree. Three critical steps to control AMD are to stop smoking, to adopt a “Mediterranean diet” and maintain a healthy weight, and to ingest a specific combination of antioxidants and zinc. The recommendations discussed above are meant to encourage a proactive approach, allowing you to take action and reduce the risk of vision loss from AMD. As an added benefit, these lifestyle changes can reduce the likelihood of other illnesses, as well, such as heart disease and cancer.

## **Recommended Vitamins and Foods**

**Vitamin C** - Oranges, grapefruit, melons, broccoli

**Vitamin E** - Whole grains, canola oil, olive oil, sunflower seeds, almonds, peanuts, cashews, walnuts, spinach, avocado, mango, blueberries, beans

**Vitamin A (Carotenoids)** - Fruit: grapes, oranges, apples, apricots, kiwis, peaches, mango, grapefruit

Vegetables: kale, collard greens, spinach, broccoli, lettuce, peas, corn, carrots, tomatoes

**Zinc** - oysters, beef, chicken, pork, lamb, fish, cashews, walnuts, pumpkin seeds, sesame seeds, beans, dairy products